4 Statistics and probability

Activity: The Monty Hall problem investigation (Student version)

A game for 2 players

One person is the host; the other person is the contestant.

• The host looks at the three cards and memorises which is the car and which are the goats.

• The host arranges the three cards in front of the contestant.

• The contestant picks a card but does not look at it. Ideally, as the contestant, you would pick the car on your first attempt.

• The host reveals one of the **goat** cards to the contestant.

• The contestant has the option to switch to the third card OR stick with their original choice.

• Record what the contestant won. (Write the item in the table below). Assume the car is a win. If they stick with the car then they have effectively won that round.

At the end of the 30 rounds, have you spotted a pattern?

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|  | Stick or switch | |
| Round number | Stick | Switch |
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